

## Tucson Water Water Conservation Program FY2013 Mid-Year Report

This report describes the activities of the Tucson Water Conservation Program for July 2013 through December 31, 2013. The program is funded through a conservation fee currently set at seven cents per hundred cubic feet.

Objectives for FY2013 are to increase participation in Tucson's incentive programs and continue to reduce Tucson's gallons per capita per day (gpcd). The strategy is to strengthen the marketing approach for all programs with public service announcements (PSAs), bill inserts, and direct mailing. Additionally, the rebate application process is being streamlined to reduce staff time and make it easier for customers to participate in the programs.

Efforts are being made to increase community and youth education opportunities in Tucson. Youth education programs will be expanding into middle school classrooms through a contract with Environmental Education Exchange (EEExchange). Project WET (Water Education for Teachers) will implement the teacher internship program. SmartScape workshops will be improved and new workshops will be developed to address the inefficiencies in landscape irrigation. Project WET and SmartScape Programs are implemented through Inter-Governmental Agreements (IGA's) with the University of Arizona.

Two rebate programs have been modified to encourage participation. The gray water rebate for single-family has been increased from \$200 to \$1,000, and the urinal rebate has been increased from \$200 to \$500. Additionally, the urinal rebate program has been expanded allowing for all WaterSense certified urinals and now includes water free urinals.

Tucson Water has a long-standing and successful history of conservation education and outreach. In the past three years, this program has been supplemented with a set of incentives offered to customers to encourage adoption of water-saving devices and practices. All such incentives are introduced as pilot projects and are evaluated after a three year period for water efficiency impacts and cost-effectiveness before being adopted as part of the permanent conservation program. Those still under evaluation are identified as pilot projects.

### 1. Community Education Programs

#### 1.1 SmartScape

Since 1989, the City of Tucson has executed a series of Intergovernmental Agreements with the University of Arizona for a landscape water conservation

program designed to reduce water consumption in commercial, industrial, multi-family, and residential water user workshops. It includes workshops on desert-wise landscaping, drip irrigation, and irrigation scheduling. Workshops to qualify for gray water and water harvesting rebates have been added in the past two years. This fiscal year through December, more than 1,100 people attended 63 workshops.

## 2. Youth Education Programs

### 2.1 Project WET

In partnership with the University of Arizona, this program offers students and teachers opportunities to learn about local water resources. These Tucson Water-sponsored programs reached 2,464 students and 94 teachers in fall 2012:

- Sweetwater Wetlands Field Trip - Students participate in four activities focused on resources, water cycle, conservation, and quality. (16 presentations, 48 classes, 1,191 students)
- Groundwater Flow Model Presentations - an interactive presentation that provides an overview of the status of the aquifer, groundwater storage, contamination, and clean-up. (17 presentations, 422 students)
- Pre-Sweetwater Field Trip Presentation for 3<sup>rd</sup> Grade – Helps students prepare for visit to the Wetlands. (35 presentations, 851 students)

Project WET will also be offering a Middle School Water Audit Program (SWAP) next school year and they have redesigned the Teacher Internship Program that will be offered this coming summer.

During the last six months, the Teacher Internship Program has undergone a complete revamping with the help of Project WET. Now called the Tucson STEM Academy, the program has been shortened from a two-week course to a four-day course in the summer along with follow-up days in the classroom with the participating teacher and their students.

The program, for middle and high school teachers, covers water management issues facing the community and provides opportunities to interact with the utility in an educational setting while focusing on science, technology, engineering, and math (STEM). The new program will be held June 17-20, 2013.

### 2.2 Environmental Education Exchange (EEExchange)

In autumn 2012, these three programs produced by EEExchange reached more than 5,028 K – 6 students:

- “Da Drops” is offered to 1<sup>st</sup>-3<sup>rd</sup> grade. It is designed to teach about the water cycle and the public water system. (142 presentations, 3,519 students)

- "Our Water, Our Future" for 4th and 5th grade addresses the water cycle, supply, quality, use, and conservation. (85 presentations, 2,219 students)
- "Tucson Toolkit" is designed for 6th grade and focuses on water cycle, supply usage, environmental concerns, and conservation. (2 schools, 5 teachers, 190 students)

Tucson Water is also working with EEExchange to develop an enhanced middle school program that will start in early 2014

### 3. Efficiency Programs – Incentive/Rebate

#### 3.1 High-Efficiency Toilet (Commercial/Industrial)

This rebate program, which began in July 2008, is designed to encourage commercial/industrial customers to retrofit older 3.5 or more gallons-per-flush toilets with high-efficiency models. This fiscal year through December, 90 toilets have been retrofitted bringing the total to 1,255 since its introduction.

#### 3.2 High-Efficiency Toilet (Multi-Family)

This rebate program, which began in July 2008, is designed to encourage multi-family customers to retrofit older 3.5 or more gallons-per-flush toilets with high-efficiency models. During the fifth year of this rebate, several water efficiency service companies have been very instrumental in promoting a comprehensive indoor retrofit approach that includes aerators, showerheads, and bathtub diverters in addition to the high-efficient toilets. This fiscal year through December, 36 multi-family properties have taken advantage of the rebate program, and 835 toilets have been retrofitted bringing the total to 3,005 since its introduction.

#### 3.3 High-Efficiency Toilet (Single-Family)

This rebate program, which began in July 2008, is designed to encourage residential customers to retrofit older 3.5 or more gallons-per-flush toilets with high-efficiency models. This fiscal year through December, 834 toilets have been retrofitted bringing the total to 9,367 since its introduction.

#### 3.4 High-Efficiency Toilet Replacement (Low-Income)

This program offers toilet replacement for qualifying low-income homeowners who are Tucson Water customers. The non-profit Community Home Repair of Arizona (CHRP) verifies participants and does the installation, while Tucson Water provides financial assistance for the reimbursement of toilets purchased and installed. From July – December 2012, 308 toilets have been replaced.

CHRP has also been repairing leaks on other bathroom fixtures with funding by Tucson Water for materials provided.

### 3.5 High-Efficiency Urinals (Pilot)

This rebate program, which began in January 2011, is designed to encourage commercial customers to retrofit high water-use urinals with high-efficiency models. Participation has been very low. Beginning January 2013, the rebate was increased from \$200 to \$500 and the range of options expanded to include waterless models.

### 3.6 Rainwater Harvesting Incentive (Pilot)

The residential rainwater harvesting incentive program is the latest addition of water-saving incentives offered by Tucson Water and was introduced in June 2012.

The rebate can be applied to both passive and active rainwater harvesting systems and offers two funding levels designed to support a broad range of rainwater harvesting practices. Applicants can decide which level to apply for based on the amount of rainwater they intend to capture onsite and on the type of practices they want to implement. Applicants can receive up to \$300 to pay for labor and materials for simple projects that are not required to meet a performance measure. Larger projects meeting a performance requirement can receive 50% of the cost up to \$2,000.

The response from the community has been very positive. More than 1,000 people have attended the rainwater harvesting workshops required to qualify for the program, and Tucson Water has processed 141 rebate applications. Qualifying workshops were offered through SmartScape, Southern Arizona Rain Gutter (SARG), and Watershed Management Group (WMG).

### 3.7 Gray Water Incentives (Pilot)

This rebate program, which began in January 2011, is designed to encourage homeowners to install gray water systems for landscape irrigation. Participants must attend a workshop before applying for the incentive. Participation has been very low. Three workshops were held from July – December 2012 with a total of 46 people attending. Five rebates were issued during that time.

The rebate amount increased from \$200 or 1/3 of the cost to install a system to ½ the cost up to \$1,000 in January 2013. Tucson Water is optimistic that this will increase the number of rebates in the coming year.

### 3.8 Irrigation System Upgrades (Pilot)

This program is intended to encourage efficiency upgrades to commercial irrigation systems. The participation rate for completion of projects has been very low throughout and the program was put on hold for reevaluation. A revised program will be implemented July 1, 2013. This fiscal year through December, 6 rebates have been issued.

#### 4. Community Outreach

##### 4.1 WaterSmart Program 2013

Tucson Water rebranded and reintroduced its WaterSmart Program to better reflect the changing drivers for water conservation programming, and to bring together the key elements that have made it a valuable resource for customers. The name has existed for several years, but in separate forms and references (i.e., WaterSmart Business Programs for certification, WaterSmart classes for residents, "Be WaterSmart" seasonal campaigns, etc.).

It became apparent that sometimes customers and staff were confused as to what constituted the WaterSmart brand and who to ask for information at Tucson Water. The key components were gathered and merged under one umbrella to promote the efficient use of water. A media conference was held in November 2012 to unveil the new brand and logo, as well as the resources now housed in one place for more convenient access and promotion.

The WaterSmart Program includes Tucson Water's rebates and incentives for residential and commercial customers, schedules of free SmartScape residential workshops, offers of free residential water audits, videos, and free publications with tips and resources, and WaterSmart Program information in English and Spanish.

In the few months since the "makeover," promotion of the new WaterSmart Program has included media releases (coinciding with City of Tucson Twitter alerts and Facebook posts), an article in "Your Water Connection" newsletter, increased distribution of the brochures in English and Spanish, and a new web page for online access to all facets of the program. More opportunities are expected in 2013 as Tucson Water increases its presence at various community events related to conservation, sustainability, environmental-related activities for children, etc.

#### 5. Community Programs

##### 5.1 Water Waste Enforcement

The vacant Utility Service Representative "Water Cop" position has been filled, improving response and follow-up time for water waste investigations.

The two Utility Service Representatives conduct daily water waste inspections throughout the Tucson Water service area. Water waste typically involves over watering, malfunctioning irrigation systems, hose washing of hard surfaces, and misting systems operating in unoccupied areas.

## 5.2 WaterSmart Business Program

This program helps business owners and managers identify ways to conserve water and be more efficient with their water use. Businesses participating in the program are recognized for achieving reductions in water usage.

Tucson Water also assists the City's Office of Conservation and Sustainable Development (OCSD) on its Green Business Certification Program by conducting a commercial walk through at an applicant's property. The Green Business Program also includes energy audits and waste/recycling audits. Staff reviews water use history, conducts flow tests during a site visit, and provides resources to reduce water use indoors and outdoors. Thirteen properties participated in this program.

## 5.3 Water Harvesting Demonstration Sites

There are currently 16 demonstration sites throughout the City that familiarize Tucsonans with a variety of water harvesting and usage projects. Staff works with all of these sites which include ward offices, Tucson Botanical Garden, Reid Park Zoo, a community garden, and a bike path. Sites are in various stages, some have been completed, some are under construction, and others have not yet broken ground. A website featuring a guided tour of the sites is planned for later this year.